

# **Code of Practice - Vehicle Inspection Guidelines**

**May 2015**

Originally Released March 2000  
Revised March 2001  
Revised August 2003  
Revised May 2014  
Revised December 2014  
Revised March 2015

© The State of Queensland (Department of Transport and Main Roads) 2014



This document is licensed under a creative commons attribution non-commercial 3.0 Australia licence. To view a copy of this licence, visit <http://creativecommons.org/licences/by-nc/3.0/au>

You are free to copy, communicate and adapt the work for non-commercial purposes as long as you attribute the State of Queensland (Department of Transport and Main Roads) 2014

# Table of Contents

1. Introduction .....	4
2. Modified Vehicles .....	5
3. Motor Vehicle and Trailer Design Requirements .....	6
4. How to Carry Out an Inspection .....	7
5. Road Test .....	8
6. Reasons for Rejection.....	9
Section 1 – Seats and Restraints .....	9
Section 2 – Lamps (lights) and electrical components .....	12
Section 3 – Windscreens and glazing.....	17
Section 4 – Body, chassis and frame.....	20
Section 5 – Tow couplings.....	27
Section 6 – Steering and Suspension.....	32
Section 7 – Wheels and tyres .....	43
Section 8 – Brakes.....	48
Section 9 – Engine, driveline and emissions .....	58
Section 10 – Vehicle safety features .....	66

# 1. Introduction

This Code of Practice sets out the detail for the detection of vehicle defects or unsafe vehicle condition by inspection in light motor vehicles, trailers and L-group vehicles. It is not expected that vehicles will be tested to stringent standards which require extensive or destructive testing or highly specialised equipment as specified in publications such as the Australian Design Rules (ADRs).

A Safety Certificate or a Certificate of Inspection is a certification that a vehicle meets the safety requirements of the *Transport Operations (Road Use Management) Act 1995* (the Act). It is expected that the Approved Examiner will utilise their trade qualifications and experience in motor vehicle repairs and maintenance and refer to any relevant information regarding vehicle manufacturer's specifications to ensure, as far as practicable, that the vehicle meets the requirements of the Act.

This publication is designed to aid in the determination of vehicle condition. Inspection procedures and limitations, where given, cannot be used as a defence for poor workmanship, inadequate facilities or where a thorough inspection was not carried out.

As there are a number of risks associated with vehicle inspections, all Approved Examiners must act with due diligence and ensure all necessary safety measures are taken during an inspection.

For information about heavy vehicle defects and inspections please refer to the National Heavy Vehicle Inspection Manual, published by the National Heavy Vehicle Regulator, available online from [www.nhvr.gov.au](http://www.nhvr.gov.au).

In this code of practice:

- **Light vehicle** means a vehicle that is propelled by a motor that forms part of the vehicle and has a gross vehicle mass (GVM) not exceeding 4.5 tonnes but excluding L-group vehicles.
- **Trailer** means a trailer with a Gross Trailer Mass (GTM) not exceeding 4.5 tonnes.  
*Note: When GTM is not available, Aggregate Trailer Mass (ATM) is to be used.*
- **L-group vehicle** means a moped (with 2 or 3 wheels), motorcycle (whether or not a side car is attached) and a motortrike.

## 2. Modified Vehicles

Many vehicles have been modified from their original vehicle manufacturer specifications. When inspecting these vehicles it is important to ensure the modifications meet the defined standards and that they have been correctly approved. To assist in determining the appropriate standards and means of approval, the following information is provided.

Modifications fall into four categories, depending on their complexity. The level of approval required increases with the complexity and risk associated with the modification.

**Minor modifications** pose the lowest risk to vehicle safety and, as such, do not require formal approval. However, the vehicle must continue to meet Queensland vehicle standards. An example of a minor modification is the installation of an accessory (e.g. long range aerial, roof racks etc).

**Basic modifications** are changes to a vehicle that are more significant than a minor modification. They do not require formal approval but must meet the “basic modifications” standards provided in *Vehicle Standards Bulletin 14 – National Code of Practice for Light Vehicle Construction and Modification*.

**Complex modifications** cover modifications such as engine substitutions, gearbox and rear axle changes, vehicle body modifications, and steering and brake replacements. These are significant modifications that can seriously affect the safety of a vehicle if not performed properly. Complex modifications are certified by approved persons who affix a modification plate to confirm the approval. (A list of modification codes is provided in Information Sheets 1a, 1b and 1c in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners*).

**Specific modifications** fall outside the scope of the codes of practice and therefore cannot be approved by an Approved Person. As such, specific modifications must be approved in by the Vehicle Standards Unit of the Department of Transport and Main Roads. This approval will be provided in writing and must be produced when the vehicle is being inspected.

For further advice regarding vehicle modifications, contact the Vehicle Standards and Modifications Advice Team on (07) 3114 5844 or by email at [vehiclestandards@tmr.qld.gov.au](mailto:vehiclestandards@tmr.qld.gov.au).

**Please Note:** Modification approvals issued by other State and Territory Registration Authorities are not recognised in Queensland. For a vehicle that has been modified and certified in another State or Territory, the owner of the vehicle must either apply to the Department of Transport and Main Roads for reciprocal recognition of the interstate approval or present the vehicle to an Approved Person to have the modification re-certified.

### 3. Motor Vehicle and Trailer Design Requirements

Motor vehicles built from 1969 for the Australian market are designed to meet specific design requirements, most of which provide safety standards for the vehicle occupants and other vulnerable road users. These requirements are set out in Australian Design Rules (ADRs) and are not easily checked without extensive test facilities.

Approved Inspection Stations (AISs) are not expected to conduct highly complex or destructive tests, however they are required to check some in-service aspects of ADR requirements. For instance, examiners should make sure that the required ADR systems are present, are not obviously modified and that they are sound and functional.

A vehicle that is subject to the ADRs has a Compliance/Identification plate or label. This plate/label gives the make and type of vehicle and the year of manufacture and, for most categories of vehicle, the number of seating positions.

The second edition ADRs apply to vehicles manufactured from 1969 to 1989 while those manufactured from 1989 must comply with the third edition ADRs.

All trailers up to and including 4.5 tonnes manufactured after 1 July 1988 will be fitted with a manufacturer's trailer plate.

Motor vehicles built prior to 1969 are not required to comply with the ADRs however, they must meet the requirements set out in the *Transport Operations (Road Use Management - Vehicle Standards and Safety) Regulation 2010*.

## 4. How to Carry Out an Inspection

Proprietors/nominees and approved examiners should remember that the vehicle owner is relying on them to ensure their vehicle meets legal requirements and is safe to drive on the road.

The Safety Certificate inspection report shows the various vehicle systems that are to be checked.

When conducting an inspection of a motor vehicle, the approved examiner should carry out no less than the following checks:

1. Verify the registration plate number, chassis number/VIN and engine number on the vehicle and record all the necessary vehicle details (i.e make and model, chassis/VIN and the odometer reading).  
**Please Note:** If the engine number is not in a conspicuous position, the number on the vehicle manufacturer's supplementary label may be used.
2. Examine the vehicle's exterior.
3. Check all doors, windows and bodywork.
4. Sit in the driver's seat and test all the driving controls.
5. Check seats, seat belts, mirrors, sunvisors, glazing and forward vision through the windscreen.
6. Check the operation of steering linkages and all lights, including the aim of the headlights. (Another person may be required to assist with the inspection of steering and some lights.)
7. Open the bonnet and check the engine, battery and any other items listed in the inspection guide.
8. Check the operation of all steering linkages, all road wheels and their fastenings and check the tyres.
9. Raise the vehicle and check the suspension, wheel bearings and steering components.
10. Check the underbody, chassis, subframes, engine and drive train, suspension systems, exhaust and braking system components. If it is necessary to remove wheels and drums to effectively examine braking components, this task should be carried out.
11. Road test the vehicle #.
12. Test the service brake and parking/hand brake. Record the results.
13. Make sure the odometer and speedometer are operating and check the vehicle for poor handling, pulling to either side or undue vibrations.
14. Prepare the inspection report carefully, making sure that all necessary information is given.

# An unregistered vehicle may only be driven on a public road if a permit is issued for the vehicle or a trade plate is used.

**Important:** From time to time, AIS proprietors/nominees and approved examiners will encounter situations that may not appear to be covered in this Code of Practice. In such cases, advice should be obtained from your local Transport Inspector or the Vehicle Standards and Modification Advice Team.

## 5. Road Test

A road test is to be conducted on all motor vehicles (trailers are not required to be road tested) to confirm the safe operation of the motor vehicle. However, if a defect has been detected during the initial visual checks which, in the opinion of the examiner, would make the vehicle unsafe to operate on the road, a road test is not to be performed. The standards to be applied during the road test are contained in the relevant component sections of this Code of Practice.

The operation of the following must be validated during the road test:

- Foot brake (including hand brake on motorbikes);
- Park brake;
- Steering;
- Clutch;
- Suspension;
- Gear change mechanism;
- Accelerator/throttle control;
- Drive line condition (including chain/belt drives on motorbikes);
- Windscreen wiper/washers;
- Driving position/visibility;
- Exhaust system;
- Speedometer and odometer operation;
- Engine does not stall at idle.
- Faults are not present with on-board control units (i.e. airbag fault light, stability control fault light etc)

**Please Note:** If a defect is detected during a road test, the examiner must record “fail” under both the road test section of the Inspection Report and the applicable section relating to the defect (i.e. brakes, steering etc).



## 6. Reasons for Rejection

The following table sets out the criteria for when a vehicle is considered defective and must fail an inspection. Each reason for rejection (Column 2) applies to all types of vehicles, unless the type of vehicle is excluded (Column 3).

Column 1	Column 2	Column 3
Component	Reason for rejection	Does not apply to
<b>Section 1 – Seats and Restraints</b> <b>Objective:</b> To ensure that all seating and restraints fitted to a vehicle provide a comfortable and secure position for vehicle occupants.		
In this section— <i><b>Seating component</b></i> includes cushions, backrests, head restraints, frames and slides and other controls (other than lumbar support controls). <i><b>Seat belt attachment</b></i> includes buckles, tongues, adjustment devices and emergency locking retractors.		
1.1 Seating	Seating components are not fitted, not secure, are structurally damaged or have sharp or jagged edges or protrusions.	Trailers
	A seating component used for adjustment of a seating position is not operational or does not hold a selected position allowed for in the mechanism's design.	Trailers
	Seating components are cracked, broken, distorted, missing or corroded to the point where the seat is weakened or failure is likely to occur.	Trailers
	Any seats are not securely mounted to the seat anchorage point.	Trailers
	Any change to seating capacity is not certified by an Approved Person with the fitment of the prescribed modification plate with the LK1 modification code.	L-Group Trailers
	Where seats and seat belts have been removed from a vehicle (e.g. rear seats in a van), mounting holes in the floor panels have not been sealed off to prevent the entry of fumes/gases to the vehicle's interior.	L-Group Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
1.2 Seat belts	Original manufacturer's seat belts are missing or replacement belts do not meet the vehicle manufacturer's specifications.	L-Group Trailers
	Seat belt assemblies are not securely attached to the respective anchorage point or show signs of distortion, cracks, fractures or other damage likely to cause failure.	L-Group Trailers
	A seat belt stalk is missing or damaged.	L-Group Trailers
	Seat belt webbing is not correctly and firmly secured at each end or is damaged, frayed, split, torn, altered or modified. <b>(See Notes 1 and 2)</b>	L-Group Trailers
	When extended, the seat belt sash does not retract (the speed of retraction should not be a cause for rejection unless it affects the overall operation of the seat belt assembly in any way).	L-Group Trailers
	Seat belt attachments are not operational.	L-Group Trailers
	Non-retractable seat belts do not have sufficient adjustment to allow effective use of the belts or do not maintain the adjusted positions.	L-Group Trailers
1.2 Seat belt anchorages	Anchorage provided by the vehicle manufacturer are not used wherever seat belts are fitted.	Trailers
	Seat belt anchorages are not securely anchored to the structure of the vehicle or show signs of corrosion, distortion, cracks, fractures or other damage likely to cause failure.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
1.2 Seat belt anchorages <i>cont'd</i>	Additional anchorages (not provided by the vehicle manufacturer) are not certified by an Approved Person with the fitment of a prescribed modification plate marked with the LK1 modification code.	L-Group Trailers
1.4 Child restraints	Child restraint anchorages (where fitted) are not securely anchored to the structure of the vehicle and/or show signs of corrosion, distortion, cracks, fractures or other damage likely to cause failure.	L-Group Trailers
	Child restraint anchorage points are weakened or obstructed by the fitting of accessories (e.g. radio speakers or storage boxes etc).	L-Group Trailers
	Additional child restraint anchorages (those not provided by the vehicle's manufacturer) are not certified by an Approved Person with the fitment of a modification plate marked with the LK6 modification code.	L-Group Trailers

**Notes about Section 1 (Seats and Restraints):**

1. Information Sheet No. 2 in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners* contains details of the ADR seat belt requirements.
2. Discoloration alone of the seat belt webbing is not a cause for rejection.

**Additional notes for Examiners:**

- A modification plate issued by a suitably endorsed Approved Person to confirm the change in seating capacity is required.
- Seat belts that have been removed or added as part of an approved modification are permitted.
- If additional seats and seat belts or replacement seat belts are fitted, second-hand seat belts are not to be used.
- Additional information can also be found in the following [Vehicle Standards Instructions](#):
  - *Vehicle Standards Instruction L 5 – Permanent and temporary removal of seats from light motor vehicles.*

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
-----------------------	----------------------------------	-------------------------------

- o Vehicle Standards Instruction G 10 -- Seat Belt Assessment

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<b>Section 2 – Lamps (lights) and electrical components</b>  <b>Objective:</b> To ensure that all lamps, reflectors and other electrical lighting components are operational and to ensure the vehicle's electrical system is secured and operating correctly.		
In this section—  <i>Lighting component</i> includes lamps, reflectors, lens and lamp reflectors.		
<b>2.1 Lighting equipment</b>	Lighting components fitted to a vehicle are not operational, are damaged or not located in positions as required by prescribed standards. <b>(See Note 8)</b>	
	Any lighting component has a tinted or opaque cover or tinting applied to it. <b>(See Note 1)</b>	
	Lighting components, including additional lighting, are not clearly visible under all normal conditions and of a consistent intensity or are affected by dirty or discoloured lenses or poor electrical contact.	
	Lighting components are not securely mounted, are faded, discoloured or are not free from cracks, holes or other damage which would allow the entry of moisture or dirt to impair the efficiency of the component. <b>(See Note 2)</b>	
	The number plate lamp/s direct/s light onto surfaces other than the rear number plate.	

	Any rear facing lamp, other than a reversing lamp, shows white light to the rear of the vehicle.	
	Any optional/additional lighting component interferes with the effective operation of any compulsory lighting component.	
<b>2.1 Lighting equipment</b> <i>cont'd</i>	A lighting component is fitted which is not required or permitted by Vehicle Standards or another law. <b>(See Note 4)</b>	
	The vehicle is fitted with a flashing light (apart from indicators and hazard lamps). <b>(See Note 7)</b>	
<b>2.2 Headlamps</b>	Headlamps are not correctly focused or aimed. <b>(See Note 3, 11 and 12)</b>	Trailers
	Reflector surfaces are tarnished or have other damage that reduces the intensity of low or high beam.	Trailers
	Headlamps are not of a consistent intensity.	Trailers
	The light from the headlamp is obstructed by the fitment of other components (for example bull bars, nudge bars or fishing rod holders).	Trailers
	A dipping device to change the headlamps from the high beam position to the low beam position and operated by the driver from the normal driving position is not fitted or operational. <b>(See Note 6)</b>	Trailers
	A device to indicate to the driver that the headlamps are in the high beam position is not fitted or operational. <b>(See Note 5)</b>	Trailers
	High Intensity Gas-Discharge (HID) assemblies are not self-levelling, do not have a wash/wipe function (light vehicles only) and/or do not disperse the light correctly.	Trailers

<b>2.2 Headlamps</b> <i>cont'd</i>	<p>The following lamps (where applicable) do not operate correctly or do not emit the colour light (as indicated):</p> <ul style="list-style-type: none"> <li>• front park or side lamps (white);</li> <li>• brake lamps (red);</li> <li>• tail lamps (red);</li> <li>• turn signal indicator lamps (amber (or white if prior to 1973);</li> <li>• rear facing signal indicator lamps (yellow/amber/red (prior to 1973);</li> <li>• hazard warning lamps (yellow/amber);</li> <li>• clearance/side marker lamps (if fitted) (front – yellow/white, side – yellow/amber, rear – yellow/amber and red) <b>(See Note 9 and 10)</b>;</li> <li>• number plate lamp/s (white);</li> <li>• reversing lamps/s (yellow/amber (pre-1989 vehicles only) or white);</li> <li>• additional lamps (if fitted). <b>(See Note 4)</b></li> </ul>	
<b>2.3 Other lamps and reflectors</b> or <b>additional lighting</b>	The reverse lamp (if applicable) operates other than when reverse gear is selected.	
	Any yellow/amber clearance lamp (if fitted) or front turn signal lamp (vehicle manufactured from January 1973) shows white light.	Trailers
	The turn signal switch is not readily operable by the driver from the driving position.	Trailers
	The turn signal operation is not indicated by means of a visible and/or audible telltale.	Trailers
	Additional headlamps (driving lamps) do not operate in conjunction with the high beam circuit only and are not fitted with an independent on/off switch. <b>(See Note 13)</b>	Trailers
<b>2.5 Rear marking plates</b>	Do not overtake turning vehicle marker plates are fitted to a vehicle with a length less than 7.5m.	L-Group

<b>2.5 Rear marking plates</b> <i>cont'd</i>	Retro/reflective rear marker plates are fitted and are damaged, faded, discoloured or insecure.	L-Group
	Retro/reflective rear marker plates do not comply with the relevant Australian Standard and are not fitted in locations specified by the prescribed standards. <b>(See Note 14)</b>	L-Group
<b>2.6 Wiring harness</b>	Electrical wiring is not securely mounted or is located in such a way that would make the vehicle unsafe.	
	Electrical wiring is not correctly insulated or is exposed to excessive heat or chafing.	
	Electrical wiring or connectors hinder driver or passenger movement or are hanging loose.	
<b>2.7 Battery</b>	A battery is not secured in a cradle or carrier using hold down clamps.	
	A battery is cracked, is leaking or has missing caps.	
	Batteries fitted in enclosed areas (i.e boot, cabin and so on) are not fitted in a sealed container which is adequately vented to the outside of the vehicle.	
<b>2.8 Warning device (horn)</b>	A warning device is not fitted or operational and the tone is not of a single pitch (Dual air or electrical horns are acceptable provided they are of a single pitch).	Trailers
	A warning device is not clearly audible or the actuating mechanism is not located within the reach of the driver in the normal driving position.	Trailers

**Notes about Section 2 (Lamps (Lights) and Electrical Components):**

1. Headlamps may be fitted with opaque covers provided they can be readily removed without the use of tools. (clear headlamp covers are acceptable provided the intensity of high or low beam is not affected)
2. Lens repairs are acceptable but must not reduce the effectiveness of the lamp when the lamp is lit.
3. Headlight aim is to be tested on a graduated screen placed 9 metres in front of the vehicle or by using an approved type headlight testing machine. An example of an approved headlight testing screen is shown in Information Sheet No. 4 in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners*.

4. Further information on lamps/lights is contained in Information Sheets No. 8 and 9 in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners*.
5. A motor vehicle built after 1953 must be fitted with a device to indicate to the operator that the headlamps are in the high beam position.
6. A motor vehicle built after 1934 that can travel at over 60 km/h must be fitted with a dual beam (dipping high/low) headlamp system.
7. Flashing lights are permitted on special use vehicles i.e. emergency vehicles and vehicles fitted or built for use in hazardous situations on a road.
8. For vehicles which are fitted with Light Emitting Diode (LED) lamp assemblies and of which some individual LEDs are not operating on a particular unit, it will be permissible to accept individual LED lamp assemblies if up to and including 20% of the LEDs in an individual assembly are not operating.

That is, if an LED lamp assembly has:

- 9 individual LEDs, it will be acceptable to have 1 LED not working.
  - 10 individual LEDs, it will be acceptable to have 2 LEDs not working.
  - 22 individual LEDs, it will be acceptable to have 4 LEDs not working.
9. For pre-ADR vehicles, clearance lamps must be fitted to all vehicles which exceed 2.2 metres in width and be mounted not more than 400mm in from the side of the vehicle, at least 750mm higher than the centre of any low beam headlamp or not lower than the top of the windscreen.
  10. Clearance lamps must be fitted to ADR complying vehicles which exceed 2.1 metres in width, be mounted not more than 400mm in from the side of the vehicle and not lower than the top of the windscreen.
  11. ADR complying vehicles - maximum low beam headlamp height is 1200mm.
  12. Pre- ADR vehicles – maximum low beam headlamp height is 1400mm.
  13. Driving lamps may be fitted in odd numbers only if they comply with *Vehicle Standards Instruction G15 - Fitment and use of driving lamps including light emitting diode (LED) light bars on vehicles*.
  14. Further information on rear marker plates is contained in Vehicle Standards Bulletin (VSB) 12 – Rear Marking Plates available from [www.infrastructure.gov.au](http://www.infrastructure.gov.au)



Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<b>Section 3 – Windscreens and glazing</b> <b>Objective:</b> To ensure that the windscreen, windows and associated components are in such a condition that the driver has a clear field of vision and provide sufficient ventilation for occupants.		
In this section— <i>Safety glass</i> includes non-shatterable transparent material. <i>Wiper component</i> includes blade rubbers and wiper arms.		
<b>3.1 Windscreen and glazing</b>	Vehicles built after 1 July 1953 are not equipped with safety glass or non-shatterable transparent material, wherever transparent material is used (windscreens, side windows or interior partitions). Non-shatterable means not able to break or be broken into many small pieces.	Trailers
	Tinting is applied to the front windscreen, apart from a strip of material fitted to the upper edge of a windscreen which extends no lower than a horizontal line contacting the uppermost point of the arcs swept by the vehicle manufacturer's original wiper blades or the upper 10 percent of the windscreen, whichever is the lesser.	Trailers
	Windows other than the front windscreen have a light transmittance factor less than 35% (T35) unless specifically approved.	Trailers
	Tinting material (of any shade) with a reflectance of more than 10% is fitted to a window.	Trailers
	Tint films are not free of bubbles, scratches or other defects that significantly affect the driver's field of view.	Trailers
<b>3.1 Windscreen and glazing</b>	That part of the windscreen swept by the wiper blades (primary vision area) is cracked, scored, chipped, badly sandblasted or otherwise damaged so as to impair the driver's vision or damage the wiper blades.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<i>cont'd</i>	The area of windscreen swept by the wipers to the right of the centre of the vehicle has bull's-eyes or star fractures more than 16mm in diameter or cracks more than 150mm long which either penetrate more than one (1) layer of the glass in a laminated windscreen or interfere with the driver's vision.	Trailers
	The interior surface of a laminated glass windscreen is cracked.	Trailers
	Windscreens are removed and not replaced.	Trailers
	Anything is fitted to the windscreen or vehicle that obstructs the driver's vision through the swept area of the windscreen.	Trailers
	Posters, stickers or other non-transparent materials that would interfere with the driver's vision are affixed to the windscreen.	Trailers
	Windows are cracked or broken.	Trailers
	At least half of the number of windows which are designed to be opened, which must include the driver's window, are not capable of being opened.	Trailers
3.2 Windscreen and glazing repairs	Windscreens are not repaired in accordance with the relevant Australian Standards.	Trailers
	Any windscreen repair exhibits significant optical defects which would distort or distract the vision of the driver when inspected from the inside of the vehicle.	Trailers
	Windscreen repair is not performed in accordance with the manufacturer's instructions.	Trailers
3.2 Windscreen and glazing repairs	Repairs in the swept area of the windscreen wipers reduce the effectiveness of the wiper blades.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<i>cont'd</i>	Replacement windscreen or window glass or any glazing is not of an approved type of safety glass and does not bear an identification mark indicating the standard to which the glass has been manufactured (e.g. AS 2080).	Trailers
	Replacement windscreen and window glass is not etched or indelibly printed with the glass manufacturer's information. Decals and adhesive labels are not acceptable.	Trailers
<b>3.3 Wipers, washers and demister</b>	Windscreen wipers are not operational at all speeds, do not return to their correct parked position or are not operable by the driver from the normal driving position.	Trailers
	Wiper components are not in good condition (i.e. rubbers are split, frayed, hardened or perished and/or wiper arms/blades are missing, bent or twisted preventing the wiper blade rubbers from clearing the windscreen effectively).	Trailers
	The vehicle is not fitted with a windscreen washer system (where applicable) that is operational, is incorrectly aimed or is not operable from the normal driving position.	Trailers
	Vehicles as listed in Information Sheet 14 in <i>Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners</i> are not fitted with a windscreen demister or washer or the windscreen demister or washer is not working.	Trailers
	A demister (where required) does not have the ability to effectively demist the screen (hot or cold air is acceptable).  <i>Note: Rear demisters and rear window wipers are not required in ADRs and, as such, they are not required to be operable.</i>	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<b>Section 4 – Body, chassis and frame</b>  <b>Objective:</b> To ensure the vehicle body is structurally sound and free from any defects, protrusions or additional fittings that are likely to increase the risk of bodily injury to any occupant and other road users.		
<p>In this section—</p> <p><b>Body kit components</b> includes side skirts, front and rear spoilers and dress-up kits.</p> <p><b>Door component</b> includes doors, hatches, catches, safety catches, removeable covers, internal and external handles and any fastening used.</p> <p><b>Frame component</b> includes a vehicle's chassis and body.</p> <p><b>Moving part</b>, for an L-group vehicle, includes chains, belts, road wheels, tyres or exhaust.</p> <p><b>Mudguard</b> includes any mudflap fitted.</p>		
<b>4.1 Doors, Hatches, Hinges and Catches</b>	Door components are not securely fitted and mounted or do not operate in the manner for which they were designed.	
	Doors/hatches/hinges/catches are cracked, broken, distorted or corroded to the point where a component is weakened or failure of a component is likely to occur.	
	Door components (as applicable) are not fitted, secure or operating correctly.	
<b>4.2. Body, Chassis and Frame (Floor Pan and Sub-frame)</b>	A frame component is cracked, sagged, broken, distorted, missing or corroded to the point where a component is weakened or failure of a component is likely to occur. <b>(see Note 7)</b>	
	Any fastenings between frame component members, including welds, are not secured or are cracked or distorted.	
	The body or any attachment/fitting is not securely mounted to the frame or chassis.	
	Any repairs carried out do not retain the original strength of the component/section.	

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
4.2. Body, Chassis and Frame (Floor Pan and Sub-frame) <i>cont'd</i>	Body blocks are fitted which lift the vehicle more than 50mm.	
	Any panels, fittings and structural components (internal and external) have sharp edges and protrusions which would increase the risk of injury to any person who comes into contact with the vehicle.	
	Cargo anchorage points are structurally damaged or repaired in a manner that does not retain the original strength of the component.	
4.3 Bull Bars <i>inc. Roo bars, nudge bars, carry racks and any structure mounted on or to the front bumper bar area of a motor vehicle.</i>	The fitting of the bull bar is such that it adversely affects the safety of the vehicle or obscures the driver's view or obscures any mandatory lamps.	L-Group Trailers
	The design and attachment of the bull bar is such that it interferes with the occupant protection systems (eg, airbags, crumple zones) built into the vehicle.	L-Group Trailers
	A bull bar is mounted in such a way that it does not meet the vehicle manufacturer's standards.	L-Group Trailers
	A bull bar is so designed or fitted that the safety of the vehicle is adversely affected.	L-Group Trailers
	A bull bar is not firmly and securely mounted and supported.	L-Group Trailers
	A bull bar is so designed that it does not minimise the potential to injure pedestrians, cyclists and other vulnerable road users. <b>(See Note 1)</b>	L-Group Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
4.3 Bull Bars <i>cont'd</i>	<p>Vehicles fitted with one or more airbags or manufactured to comply with <i>ADR 69 - Full Frontal Impact Occupant Protection</i> or both <i>ADR 69</i> and <i>ADR 73 – Offset Frontal Impact Protection</i>, are not fitted with a bull bar which:</p> <ul style="list-style-type: none"> <li>– has been certified by the vehicle manufacturer as suitable for that vehicle; or</li> <li>– has been demonstrated by the bull bar manufacturer to not adversely affect compliance with the ADRs or interfere with the critical airbag timing mechanism, as the case may be. This must be indicated by the fitting of a plate or sticker by the bull bar manufacturer detailing compliance to ADRs.</li> </ul>	L-Group Trailers
4.4 Body fittings	A part of the vehicle/trailer or component fitted to it obscures any compulsory lighting or the number plate.	
	The rear surface of a specified vehicle is not painted silver or white. <b>(See Note 8 and 9)</b>	Light Vehicles L-Group
	Fairings or any attachments are not free of sharp edges or protrusions, corrosion, fractured panels or fittings likely to cause injury to any person with whom the motorbike may come into contact.	Light Vehicles Trailers
	Motorbikes are not fitted with adequate protection (for rider and passenger) from any moving part or any area which would constitute a safety hazard.	Light Vehicles Trailers
	A side-car (if fitted) is not securely attached and mounted to the left hand side of the motorbike. <b>(See Note 5)</b>	Light Vehicles Trailers
	Any part of a motorbike (without a side-car) projects more than 150mm ahead of the front wheel or 300mm behind the rear wheel.	Light Vehicles Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
4.5 Motorbike riding controls	Riding controls are not securely fastened or not in the correct location as per the relevant ADR for date of manufacture.	Light Vehicles Trailers
	The incorrect number of footrests are fitted (as per the seating capacity of the motorbike).	Light Vehicles Trailers
	Footrests are bent, damaged or not secure.	Light Vehicles Trailers
4.6 Mudguards and wheel arches	The mudguards are not secure.	
	Mudguards are not capable of deflecting downwards any mud, water, stones or any other substance thrown upward by the rotation of the wheels. <b>(See Note 2 and 6)</b>	
	Mudguards are not properly fitted to provide protection over the full width of the wheels and tyres and any mudguard does not extend inboard over the full width of the tyre/s (except where part of the body of the vehicle acts as a mudguard).	
	The front mudguard does not shield that portion of the wheel extending rearward from a point vertically above and horizontally behind the centre of the front wheel.	Light Vehicles Trailers
4.7 Rear vision mirrors	Rear vision mirrors are not fitted in accordance with prescribed standards. <b>(See Note 3)</b>	Trailers
	Rear vision mirrors fitted to any vehicle do not provide a clear view of the road to the rear of the vehicle when the operator is in a natural driving/riding position.	Trailers
	Mirrors are not securely mounted or free from damage, blemishes or tarnishing which would reduce the view to the rear of the vehicle.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
4.7 Rear vision mirrors <i>cont'd</i>	Where there is no effective rear vision provided by the internal rear vision mirror, the vehicle does not have an external rear vision mirror fitted to each side of the vehicle.	Trailers
4.8 Fairings and scoops	Bonnet scoops are not fitted in accordance with prescribed standards. <b>(See Note 10)</b>	L-Group Trailers
	Body kit components (if fitted) adversely affect ground clearance and air flow for brake cooling. <b>(See Note 4)</b>	Trailers
	Surfaces that could reflect light towards the driver are not non-reflective.	Trailers
4.9 Number plates	Number plate covers are tinted, reflective, have a convex or concave surface, or in some way may affect visual or photographic recognition of the registration number.	
	A number plate is deteriorated, faded or damaged to an extent that the registration number is not legible from a distance of 20 metres.	
	A number plate is modified or trimmed in any way (for example, cutting or bending to aid fitting to the vehicle).	
	Number plate characters are not visible from any point within an arc of 45 degrees at a distance of 20 metres above and on both sides of the number plate.	
	Number plate is mounted more than 1300mm from the ground.	
	A number plate is mounted which is not in an upright position parallel to the vehicle's axles when the vehicle is on level ground.	



Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
4.9 Number plates <i>cont'd</i>	The registration number and/or plate is not issued or approved by a State or Territory Road Transport Authority.	

**Notes about Section 4 (Body, Chassis and Frame):**

1. For guidance on recommended bull bar profiles refer to AS 4876.1-2002
2. Further information on mudguards and mudflaps is contained in Information Sheet No. 3 in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners*.
3. At least one rear vision mirror must be fitted to a car (after 1 January 1972, an external rear vision mirror must be fitted to the right side of a car – refer to details of ADR 14 for other vehicle ADR applicability dates).

At least one rear vision mirror must be fitted to each side of a motorbike with one front wheel built after June 1975.

ADR 14/02 now permits the use of a driver's side and internal convex rear view mirrors. Additionally, left side convex rear view mirrors are acceptable.

Older vehicles are permitted to be fitted with convex mirrors provided they comply with the ADRs.

Rear vision and reversing cameras are considered accessories (cannot replace the mandatory rear vision mirrors) and therefore are not required to operate.

4. Further information on ground clearance is contained in Information Sheet No. 13 in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners*.
5. Motorbike sidecars with bolt on attachment points are acceptable. Motorbike sidecars with welded on attachment brackets require approval from the Department of Transport and Main Roads.
6. Further information on motorbike mudguards is contained in *Vehicle Standards Instruction M4.1 – Motorcycle mudguard requirements*.
7. Minor rust/corrosion in body panels is not considered dangerous to structural integrity. Further information on rust is contained in Information Sheet No. 11 in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners*.

8. Any trailer which is more than 2.2 metres in width and fitted with a body which is less than 300mm in height at the rear, measured from the lowest point of the body above the ground to the highest point, does not have the rear face of any rear mudguards painted silver or white.
9. The rear coaming of any trailer described above is not painted silver or white in colour for a depth of 75mm or more. The above does not apply when a vehicle is correctly fitted with rear marker plates.
10. Further information on bonnet scoops can be found in the LZ section of the *National Code of Practice for Light Vehicle Construction and Modification*.

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<b>Section 5 – Tow couplings</b>  <b>Objective:</b> To ensure that all tow couplings and associated components are in a serviceable condition and that they provide the necessary load carrying capacity.  In this section—  <b>Coupling device</b> includes tow bars, tow hooks, automatic pin type couplings, fifth wheels/turntables, skid plates, king pins, mounting bolts and any attachments for any of the items listed.  <b>Coupling connector</b> includes electrical wiring and flexible pipes.  <b>Safety chain</b> includes a cable that performs the same function.		
<b>5.1 Tow couplings, wiring harness and safety chain attachment points</b>	Where ADR 62 applies, the tow coupling does not display the name or trademark of the manufacturer, the make and model of the vehicle for which the tow coupling is designed and the tow coupling maximum rated capacity.	
	Any locking mechanism associated with the coupling assembly or its attachment to the vehicle is missing, not fitted, inoperative, damaged or worn to an extent that the coupling is not secured and held in place within manufacturer's tolerances.	Trailers
	Any part of the tow bar is cracked, excessively worn or repaired by heating or welding.	Trailers
	The tow bar is not mounted directly to the frame or through rigid connections to the frame.	Trailers
	Tow coupling tongue assemblies are not securely mounted to the tow bar/frame assembly.	Trailers
	A 50mm tow ball assembly (if fitted) is not legibly and indelibly marked with the mark "50" in characters not less than 5mm high.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
5.1 Tow couplings, wiring harness and safety chain attachment points <i>cont'd</i>	Where any part of the coupling or tow bar is removable, the bolts, studs, nuts etc. fastening those parts do not have a locking device such as an R-clip, split pin, spring washer or nylon lock nut.	Trailers
	Safety chain or cable attachment points are damaged or worn which may allow accidental disconnection of the chain or cable.	Trailers
	Coupling devices are not operational, missing, not secure, cracked, corroded, excessively worn, deformed or damaged in a way likely to cause failure.	Trailers
	Pin couplings or pintle hooks are worn beyond manufacturer's limits or, if the manufacturer's limits are not known, any dimension on a wear surface of the horn of a pintle hook or pin coupling is worn by more than 5% of the original diameter.	Trailers
	All coupling devices and coupling connectors associated with a device for coupling a trailer to a motor vehicle are not operational, not secure, or are cracked, corroded, excessively worn, leaking, deformed or damaged in a way likely to cause failure.	
	An adaptor is used to fit a kingpin to a fifth wheel coupling. <b>(See Note 2)</b>	Light Vehicles L-Group
	Tow couplings are repaired by heating or welding.	Light Vehicles L-Group
	Tow couplings are not securely mounted to the trailer drawbar.	Light Vehicles L-Group
	The coupling is not of a positive locking type and not fitted with an efficient and secure latching/fastening device.	Light Vehicles L-Group

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
5.1 Tow couplings, wiring harness and safety chain attachment points <i>cont'd</i>	The drawbar of a trailer is not securely fixed to the trailer frame/chassis.	Light Vehicles L-Group
	Any sliding drawbar stops or latching mechanism is faulty or inoperative.	Light Vehicles L-Group
	All drawbar components and coupling devices are not free of cracks, corrosion, distortion, misalignment or other damage.	Light Vehicles L-Group
	Drawbar eye is elongated by wear, cracked or worn by more than 5% of the original diameter or manufacturer's specifications.	Light Vehicles L-Group
	Drawbar eye bush is worn through or beyond manufacturer's specifications, is insecure or is attached by welding (unless the manufacturer specifies welding).	Light Vehicles L-Group
	Where any part of the coupling, drawbar or tow bar is removable, the bolts, studs, nuts etc. fastening those parts do not have a locking device such as a U-clip, split pin, spring washer or nylon lock nut.	Light Vehicles L-Group
	Safety chain/s (as required) are not securely attached to the trailer drawbar. <b>(See Notes 3)</b>	Light Vehicles L-Group
	On rigid drawbar pig trailers in excess of 2.5 tonnes GTM or other trailers in excess of 3.5 tonnes ATM, there are less than 2 chains of adequate diameter. <b>(See Notes 3 and 4)</b>	Light Vehicles L-Group
5.1 Tow couplings, wiring harness and	Breakaway brakes on any rigid drawbar pig trailer with an ATM of 2.5 tonnes or more are not capable of activating before the safety chains have broken or the drawbar touches the ground.	Light Vehicles L-Group

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
safety chain attachment points <i>cont'd</i>	Safety chains (if required) are stretched, nicked, frayed, excessively corroded or cracked.	Light Vehicles L-Group
	Any trailer without breakaway brakes is not fitted with at least one safety chain of the nominated size and the specified rated capacity. <b>(See Note 4)</b>	Light Vehicles L-Group
	Trailers with an Aggregate Trailer Mass (ATM): <b>(See Note 1)</b> <ul style="list-style-type: none"> <li>of 2.5 tonnes or less, do not have at least one safety chain capable of being attached to the towing vehicle; <b>(See Notes 3 and 4)</b></li> <li>greater than 2.5 tonnes, do not have two safety chains capable of being attached to the towing vehicle. <b>(See Notes 3 and 4)</b></li> </ul>	Light Vehicles L-Group
	The length of the safety chain/s does not prevent the trailer's drawbar hitting the ground if the trailer is detached from the towing vehicle and there is at least one safety chain which is not positioned such that it prevents the drawbar from touching the ground when the drawbar is detached.	Light Vehicles L-Group
5.2 Towing capacity	In the case of trailers manufactured after 1 July 1988, the tow coupling manufacturer's name or trade mark and maximum operating capacity is not displayed on the coupling in a conspicuous position.	Light Vehicles L-Group

**Notes about Section 5 (Tow Couplings):**

1. Aggregate Trailer Mass (ATM) is the total mass of the laden trailer when carrying the maximum load recommended by the manufacturer. This includes any mass imposed onto the drawing vehicle when the combination vehicle is resting on a horizontal supporting plane. Therefore, the ATM is the mass of the fully laden trailer when it is not connected to the towing vehicle.
2. An example of this is where an adaptor is used to convert a 50mm kingpin into a 75mm kingpin.

3. The *Transport Operations (Road Use Management – Vehicle Standards and Safety) Regulation 2010* requires that a trailer which is in a combination and is not fitted with breakaway brake, must be connected to the towing vehicle by at least one (1) chain, cable or other flexible device (the "connection") as well as the coupling.

The fitting of safety chains on other types of trailers fitted with an emergency brake system (breakaway) is optional.

In addition to that stated above, departmental policy requires safety chains on all fixed or rigid drawbar pig trailers with a GTM greater than 2.5 tonnes and fitted with an automatic pin type coupling, irrespective of whether the trailer is fitted with a breakaway brake system or not.

4. Information about minimum chain and shackle sizes is available in Information Sheet No. 12 in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners* or the *Safe Towing Guide* available at [www.tmr.qld.gov.au](http://www.tmr.qld.gov.au).

To comply with this requirement, the brake connection between the vehicle and trailer must be short enough to cause disconnection before full extension of the safety chains.

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<b>Section 6 – Steering and Suspension</b>  <b>Objective:</b> To ensure that the steering and suspension is in good working order and allows the driver effective control of the vehicle.  In this section— <i><b>Control devices</b></i> , in relation to an L-Group vehicle, includes knobs levers. <i><b>Axle locating devices</b></i> include locating arms and associated componentry. <i><b>Sway bar components</b></i> include sway bars, linkages and bushes. <i><b>Suspension dampening components</b></i> means any part of the vehicle's suspension dampening system and includes shock absorbers and suspension struts.		
<b>6.1 Steering components</b>	Any steering components are not in good condition, are missing, cracked or broken or are not securely mounted and free from damage or distortion or have free play beyond manufacturer's limits. <b>(See Note 1)</b>	
	Steering stops do not prevent wheels or tyres from fouling any component on full steering lock.	
	Any fastener is missing or insecure.	
	Steering components are removed, heated, welded (modified) or bent without approval.	
	The steering wheel is not located to the right hand side of the vehicle unless the vehicle is 30 years or older.	
	Any power steering component (electric or hydraulic) is leaking, not secure, damaged or inoperative.	



Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
6.1 Steering components <i>cont'd</i>	Any power steering belts are loose, broken, frayed, missing or cracked through to reinforcing plies.	
	The steering system is not designed to transmit energy by mechanical means only (power assisted steering systems are acceptable).	
	Free play in any component exceeds the manufacturer's specifications. Where the manufacturer does not provide specifications or they are no longer appropriate, the free movement exceeds 3mm.	
6.2 Steering freeplay	With the road wheels in the straight ahead position, and the engine running (if the vehicle has power steering), freeplay in the steering wheel rim outer edge exceeds 75mm in steering wheels up to and including 450mm diameter or 100mm for steering wheels over 450mm diameter.	L-Group Trailers
6.3 Steering wheel	Steering wheel is not securely fixed to the steering column mast shaft or is not free from structural damage (e.g. loose or damaged padding).	Trailers
	The steering wheel and accessories (padded hubs, covers, steering wheel grip etc.) are loose or have deteriorated to an extent that they are likely to cause injury to the occupant.	Trailers
	Steering wheel does not meet the minimum diameter requirements. <b>(See note 2)</b>	Trailers
	Steering wheels fitted to light passenger vehicles manufactured on or after 1 January 1971 are not replaced by a steering wheel which complies with ADR 10A or, where ADR 69 applies, the steering wheel is not of the same specification as the one provided by the vehicle manufacturer. <b>(See Note 2)</b>	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
	Where a Supplemental Restraint System (SRS air bag/s) is fitted, there is evidence that the system or airbag/s is inoperative.	Trailers
6.4 Steering shaft	The steering shaft is not secured to the steering box worm shaft, pinion or coupling or is incorrectly aligned or adjusted.	Trailers
	Where a coupling is fitted, it is loose, frayed or otherwise damaged.	Trailers
6.5 Outer column	The outer column is not securely mounted or free from cracks and damage. <b>(See note 3)</b>	Trailers
	Wear in the bushes/bearings supporting the shaft exceeds manufacturer's tolerances.	Trailers
	Where ADR 25 applies, the ignition key can be removed in any position except in the locked position.	Trailers
	When engaged, the anti-theft lock does not prevent at least one of the following actions: <ul style="list-style-type: none"> <li>Steering of the vehicle;</li> <li>Engaging the forward drive gears;</li> <li>Release of the brakes.</li> </ul>	Trailers
6.6 Steering box/rack	Any manual or power steering component is not securely mounted or free from excessive side or end play, displays roughness when operated, binding or leaks oil when operated through its normal range of travel.	Trailers
	Steering rack seals are damaged, deteriorated or missing.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
6.7 Steering linkages mechanism	With the wheels off the ground, the steered road wheels do not turn freely to the left and right through their normal full range of travel.	
	Steering linkages are damaged, worn, misaligned or are not correctly located or fitted.	
6.7 Steering linkages mechanism <i>cont'd</i>	Tie rod and drag link ends are not secured in both the rod and taper with fasteners that are suitably locked (e.g. split pins, lockwire, tabs or self locking nuts).	
	Free play due to wear in any component exceeds the manufacturer's specifications. Where the manufacturer does not provide specifications or they are no longer appropriate, the free movement exceeds 3mm.	
	Steering idler or bushing is loose on mountings or is worn in excess of manufacturer's specifications. Where the manufacturer does not provide specifications or they are no longer appropriate, the free movement at the end of the idler arm or idler pivot axis exceeds 8mm.	
	Through the full range of steering movement, steering stops do not prevent wheels or tyres from fouling the vehicle chassis or suspension components on full lock.	
6.8 Arms and linkages	There is any movement in the spline between the pitman arm and the steering box or between any thread or tapered joint.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
	<p>The free movement measured at the front or rear of the tyre when attempting to turn the assembly from the right to left with the vehicle supported on the lower control arm exceeds the manufacturer's specifications. Where the manufacturer does not provide specifications or they are no longer appropriate, the free movement exceeds the following measurements:</p> <ul style="list-style-type: none"> <li>• Wheel rims 405mm or less — 7mm;</li> <li>• Wheel rims over 405mm up to 455mm — 10mm;</li> <li>• Wheel rims over 455mm — 13mm.</li> </ul>	
	The looseness at any one point is responsible for half or more of the movement specified in the above table.	
<b>6.9 Steering mechanism and design</b>	The handlebar of a motorbike is not secure or free play in the steering head exceeds manufacturer's specifications.	Light Vehicles Trailers
	Where steering linkages are fitted, any rotational free play exceeds 10mm at the end of the handlebar.	Light Vehicles Trailers
	Steering gear is not so designed so as to eliminate accidental detachment or over-locking.	Light Vehicles Trailers
	Steering components are misaligned with the frame or are damaged, fatigued, corroded or distorted.	Light Vehicles Trailers
	Operation of the handlebar is not smooth (without jamming, fouling or roughness in its operation) from "lock to lock".	Light Vehicles Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
	Any equipment fitted to the motorbike, including motor tricycle(s) and side car, prevents free movement (e.g. the handlebar must not come into contact with the fuel tank).	Light Vehicles Trailers
	The handlebar assembly is not constructed of suitable material, adequately mounted or free of sharp edges and protrusions.	Light Vehicles Trailers
	The handlebar is not symmetrical on either side of the front wheel and steering head assembly.	Light Vehicles Trailers
	The handlebar is not of the same shape and length on both sides of the front wheel and steering head assembly.	Light Vehicles Trailers
<b>6.9 Steering mechanism and design</b> <i>cont'd</i>	If the forks are raked (i.e. modified wheelbase), the horizontal distance between the mid-point of the steering yoke bearings and a point vertically above the centre of the front wheel exceeds 550mm.	Light Vehicles Trailers
	Motorbikes fitted with offset triple clamps have a trail measurement of less than 75mm. <b>(See Note 7)</b>	Light Vehicles Trailers
	Handlebar grips and control devices have deteriorated to an extent that they are not secure, or are excessively damaged or unduly worn.	Light Vehicles Trailers
<b>6.10 Handlebar dimensions</b>	The distance between the extreme ends of the handlebar assembly is greater than 900mm or less than 500mm.	Light Vehicles Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
	<p>For motorbikes manufactured prior to July 1988 the lowest part of the handgrip on the handlebars is higher than 380mm above the steering yoke. (Handlebars modified in accordance with the LM section of the <i>National Code of Practice for Light Vehicle Construction and Modification</i> should meet these requirements).</p> <p>For motorbikes manufactured from 1 July 1988 the height of the lowest part of the handgrip is more than 380mm above the lowest part of the upper surface of the rider's seat.</p>	Light Vehicles Trailers
6.11 Suspension components	Components are distorted, cracked, corroded, fractured or are worn beyond manufacturer's specifications.	
	Free play in any component exceeds the manufacturer's specifications. Where the manufacturer does not provide specifications or they are no longer appropriate, the free movement exceeds 3mm.	
	Link ends are not secured with suitably locked fasteners (e.g. split pins, lockwire, tabs or self locking nuts).	
	Any fastener is missing or not secure.	
	Suspension components are worn beyond manufacturer's specifications.	
6.11 Suspension components <i>cont'd</i>	Suspension components are not securely mounted and aligned, or are missing bent or are repaired or modified by heating or welding without departmental approval. <b>(See Note 8)</b>	
6.12 Spring media	Components including the axle, "U" bolts, spring hangers, centre bolts etc. are not correctly aligned, adjusted, securely mounted or are missing, unduly worn, rusted, cracked or damaged.	

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<i>i.e. springs, spring hangers, torsion bars</i>	Nuts do not fully engage “U” bolts.	
	Suspension heights are lowered or raised by more than one-third of the manufacturer’s bump stop clearance. <b>(See Note 6)</b>	
	Any spring is cracked, broken, missing or displaced by more than 10% of its width or makes contact with wheels, brakes or the frame.	
	Non-standard or manufacturer’s non-optional air or hydraulic suspension is fitted without specific departmental approval. <b>(See Note 4)</b>	
	Air bag or hydraulic suspension components (if fitted) are not in working condition or are leaking or perished.	
	Coil springs do not remain in locating seats on full suspension droop.	
<b>6.12 Spring media</b> <i>cont’d</i>	<p>If a vehicle body (front or rear) is lowered or raised, the following reasons for rejection are based on the manufacturer's dimensions for the standard unmodified vehicle while unladen:</p> <ul style="list-style-type: none"> <li>• The ride height measured between the rubber bump stop and the corresponding metal stop is reduced by more than one third.</li> <li>• The rebound travel measured between the rubber rebound stop and the corresponding metal stop (or the extension of the shock absorber for vehicles without a rebound stop) is reduced by more than one third.</li> <li>• Mandatory lighting/lamp heights no longer comply.</li> </ul>	
	The normal relationship between the front and rear suspension heights is unduly affected.	

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
	Suspension coil springs are lowered by cutting or heating.	
	Leaf spring suspension is altered by the use of adjustable metal plates or by placing the leaf springs to the opposite side of the axle (repositioning over axle spring location to under axle spring location or vice versa).	
	Lowering blocks that are made of material other than either steel or aluminium.	
6.13 Axle locating arms and devices <i>ie. shackles and bushes</i>	Axle locating devices are not in good working order, are excessively worn, cracked or damaged, or are not securely mounted or correctly adjusted.	
	Extended or non-approved shackle plates are fitted except where approved by the vehicle manufacturer as an option.	
6.13 Axle locating arms and devices <i>cont'd</i>	Any free movement in pivot pins, king pins, ball joints, bushes or trunnions, when measured at the outer extremities of the tyres, exceeds manufacturer's tolerances, or where manufacturer's tolerances are not available, exceed the following: <ul style="list-style-type: none"> <li>• Wheel rims 405mm or less — 7mm;</li> <li>• Wheel rims over 405mm up to 455mm — 10mm;</li> <li>• Wheel rims over 455mm — 13mm.</li> </ul>	
6.14 Sway bars, linkages and bushes	Sway bar components are broken, loose, unduly worn, disconnected or have been removed.	
6.15 Wheel bearings	Any wheel bearing is incorrectly adjusted, rough, noisy, loose on stub axle, does not rotate freely or is leaking.	



Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
	Movement between disc brake rotor/brake drum and backing plate exceeds manufacturer's specifications.	
6.16 Suspension dampening system	Suspension dampening components are not fitted, are inoperative, not securely mounted or brackets or rubbers are missing, worn or damaged.	
	Suspension dampening components do not effectively dampen movement or show signs of leakage. <b>(See Note 5)</b>	
6.17 Ground clearance	The road clearance of a fully laden vehicle is less than 100mm measured at any part of the vehicle other than the wheel rim or brake backing plates. If a lesser clearance has been specified by the manufacturer, the clearance must not be less than that specified clearance. <b>(See Note 6)</b>	Trailers

**Notes about Section 6 (Steering and suspension):**

1. Must be inspected through the full range of steering movement, steering stops must prevent wheels or tyres from fouling the vehicle chassis or suspension components on full lock.
2. The minimum diameter of any replacement steering wheel must not be less than 330mm. The replacement wheel must be designed in a similar manner to the original (e.g. padded centre hub and dished spokes).  
A replacement steering wheel fitted to a vehicle complying with ADRs 69/.. or 73/.. must remain compliant.  
A replacement steering wheel fitted to a pre ADR 69/.. vehicle equipped with a driver's side airbag as original equipment must remain fitted with an airbag operating to manufacture's specifications.
3. Special attention should be made to the collapsible section (if applicable) of the outer housing.
4. Airbag or air pressurised shock absorber helper springs may be fitted in addition to the original suspension without specific departmental approval.

5. Shock absorbers or suspension struts are permitted to show signs of oil weeping provided the units still function as required. Check with component manufacturer for full details.
6. Ground clearance requirements for motor vehicles are detailed in Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners - Information Sheet No. 13.
7. If offset triple clamps are fitted to the front fork assembly (i.e. the clamps are machined such that the angle of the fork stanchions is at an angle to the steering head axis), then the trail measurement should be checked to ensure that the centre of the front axle is at least 75mm behind the point where the steering head axis line intersects the ground.
8. It is common industry practice to repair or re-manufacture spring hangers (rocker boxes). This will necessitate the welding of the original castings (in the case of repairing) to rebuild the component to its original configuration. This means of repair is acceptable, provided the method of repair and welding technique is to an acceptable standard.

**This method of repair is acceptable for trailers only.**

Column 1	Column 2	Column 3
Component	Reason for rejection	Does not apply to
<b>Section 7 – Wheels and tyres</b> <b>Objective:</b> To ensure that road wheels and tyres are of a suitable type and condition and they provide the necessary load carrying capacity, speed rating and control of the vehicle.		
<b>7.1 Wheels / rims</b>	Wheels are not of an approved type and construction. <b>(See Note 1)</b>	
	Wheels fitted to an axle or axle group are not of the same size unless otherwise specified by the vehicle manufacturer. <b>(See Note 1)</b>	
	Wheels fitted to an axle or axle group are not of the same size unless otherwise specified by the manufacturer.	
	Stud or bolt holes are expanded or elongated or wheel and retainer tapers do not match.	
	Any hub has missing or broken wheel mounting nuts, studs or bolts.	
	Wheels rub or foul on any part of the vehicle/trailer over its full range of travel.	
	Wheels are not of an approved type and construction or are not compatible with hubs.	
	Wheels fitted to an axle or axle group of a trailer are not of the same size unless otherwise specified by the vehicle manufacturer.	
	Wheels are not secure or show signs of movement, are cracked, corroded, bent, buckled, have pieces of casting missing, show signs of welding (as a repair) or are otherwise damaged.	
	A spoked wheel does not have all spokes fitted or spokes are loose, corroded, bent, broken or cracked.	

Column 1	Column 2	Column 3
Component	Reason for rejection	Does not apply to
7.1 Wheels / rims <i>cont'd</i>	Tyre retaining rings are not in good condition or are incorrectly seated, sprung, mismatched, bent, broken, cracked, or the ends meet when fitted to the rim.	
7.2 Wheel studs, nuts, lockrings and hubs	Rims are not fitted with the correct number and type of nuts or studs.	
	Fasteners are not securely fitted, are damaged or not engaged for at least the same thread length as provided originally by the vehicle manufacturer.	
	Any hub has missing, cracked, stripped or broken wheel mounting nuts, studs or bolts.	
	Spacer plates are used between hub and wheels (except where fitted by the vehicle manufacturer).	
7.3 Tyres	Tyres are not compatible with the rim to which they are fitted.	
	Tyres are not of a type suitable for normal road use. <b>(See Note 5)</b>	
	All tyres fitted to rims on the same axle are not of the same case construction (Steel radials, textile radials or conventional crossply).	
	Tyres fitted to rims on an axle or axle group are not the same size. <b>(See Note 1)</b>	
	Tyre load ratings are less than the minimum ratings specified originally by the vehicle/trailer manufacturer.	
	The speed rating of any tyre is insufficient. <b>(See Note 2)</b>	
	Where a vehicle has been fitted with retreaded tyres, the tyres are not marked with the name or identification of the retreader of the tyre and/or speed and load rating of the tyre.	

Column 1	Column 2	Column 3
Component	Reason for rejection	Does not apply to
7.3 Tyres <i>cont'd</i>	Tyres do not have a tread pattern at least 1.5mm deep, other than at tread wear indicators, in a band that runs continuously across the tyre width that normally comes into contact with the road and around the whole circumference of the tyre.	
	Tyre tread, shoulder or sidewall is damaged.	
	Tyres have cuts, bulges, tread separation, exposed or damaged cords or other evidence of case failure.	
	Any tyre on a vehicle contacts the body, inner guard, chassis, frame, braking, steering or suspension components at any point through its full range of travel.	
	Valve stems are cracked, damaged, perished or loose.	
	Regrooved or recut tyres fitted to a motor vehicle are not clearly marked "suitable for regrooving".	
	Any tyre clearly marked "suitable for regrooving" is regrooved or recut beyond the maximum permissible groove depth or is regrooved or recut in such a way that the ply or cord is exposed or damaged.	
	The sidewalls of a dual tyre configuration contact each other.	
7.4 Tyre/wheel width	For a car or car derivative, the maximum tyre width is more than 1.3 times larger than the vehicle manufacturer's widest optional tyre width. <b>(See Note 4)</b>	L-Group Trailers
	For an off-road passenger vehicle (four wheel drive) fitted with front and rear beam axles, the maximum tyre width is more than 1.5 times larger than the vehicle manufacturer's widest optional tyre width. <b>(See Note 4)</b>	L-Group Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
7.4 Tyre/wheel width cont'd	The tyre width of the narrowest tyre fitted to a vehicle is less than 70 percent of the width of the largest tyre fitted or less than the manufacturer's narrowest optional tyre and rim as indicated on the manufacturer's tyre placard.	L-Group Trailers
	The original manufacturer's front or rear wheel track for a four wheel drive/off-road passenger vehicle is increased by more than 50mm. <b>(See Note 3)</b>	L-Group Trailers
	The original manufacturer's front or rear wheel track measurements for a car or car derivative is increased by more than 25mm. <b>(See Note 3)</b>	L-Group Trailers

**Notes about Section 7 (Wheels and tyres):**

1. Road wheels relate only to those wheels in contact with the road. The spare wheel is not included in a safety check.  
Please also refer to the LS Section of the National Code of Practice for Light Vehicle Construction and Modification.
2. A tyre fitted to a motor vehicle must, when first manufactured, have been rated by the tyre manufacturer as suitable for road use at the lower of:
  - a. a speed of at least:
    - i. for an off-road passenger vehicle – 140 km/h; or
    - ii. for a car or car derivative – 180 km/h; or
    - iii. for another motor vehicle – 120 km/h; and
  - b. the vehicle's top speed.

**Note:** Schedule 1 Section 42 of the *Transport Operations (Road Use Management –Vehicle Standards and Safety) Regulation 2010* permits the use of retreaded tyres retreaded in accordance with Australian Standard 1973. Refer to Information Sheet No. 15 in *Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners*.
3. Where the manufacturer offers the option of a wider track measurement (e.g. where wider wheels are optional), the maximum allowable track will be the maximum wheel track offered by the manufacturer plus 25mm for a car or car derivative or 50mm for a four wheel drive/off-road passenger vehicle, whichever is the greatest.

Alternative wheels and tyre requirements for light motor vehicles are detailed in the LS Section of the National Code of Practice for Light Vehicle Construction and Modification. Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners - Information Sheet 14 has further information about vehicle definitions.

4. Maximum regulation dimensional limits must not be exceeded.

**Note:** *The requirements for fitting of alternative size rims and/or tyres are covered by the LS Section of the National Code of Practice for Light Vehicle Construction and Modification.*

5. Motorbike tyres branded "Not Suitable for Highway Use" (NHU) are not to be rejected solely for this reason.

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<b>Section 8 – Brakes</b> <b>Objective:</b> To ensure that the brakes operate effectively and are correctly adjusted.		
<p>In this section—</p> <p><b>Brake components</b>, for an air or vacuum brake system, includes all components such as any air lines, hoses, compressors, pumps, valves, chambers, switch controls, actuators and any associated componentry.</p> <p><b>Brake linings</b> includes disc brake pads, shoe linings as well as any separate park brake linings.</p> <p><b>Brake pedal</b> includes a brake level as well as any components associated with the pedal or lever.</p> <p><b>Hand brake component</b> includes a handle, pedal, actuator (i.e. an electric solenoid) or associated component of a hand brake or park brake system.</p> <p><b>Hydraulic component</b> include all parts of a hydraulic system such as the master cylinders and wheel cylinders/calipers.</p> <p><b>Warning device</b> includes a failure indicator.</p>		
<b>CAUTION: Extreme caution should be taken when inspecting uncoupled trailers, particularly if they do not have a parking brake. Wheel chocks should be utilised, where necessary.</b>		
8.1 Brake system	Where visible, any brake component is leaking or is not securely mounted.	
	Any braking cables are broken, frayed, damaged or not secured.	
	Any brake component is seized, severely corroded or inoperative or, where worn, is worn beyond manufacturer's limits.	
	Brake chambers (including chamber clamps) or camshaft support brackets are missing, loose, damaged or broken.	



Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
8.1 Brake system <i>cont'd</i>	Brake shoes, springs, anchor pins, cam rollers or bushes, pull or push rods, clevis pins, retainers or brake chamber mounting bolts are missing, loose, damaged or broken.	
	Motorbikes do not have two independent braking systems or a single brake that acts directly on all wheels of the vehicle and is arranged so that effective braking remains on at least one wheel if any part of the system fails.	Light Vehicles Trailers
	Any wiring for electric brakes is disconnected, frayed or insecure.	Light Vehicles L-Group
	A trailer interconnecting flexible hose and/or coupling is not properly secured or damaged.	Light Vehicles L-Group
8.2 Brake system operation	The brake controls, when operated, do not cause the corresponding brake to operate (with the engine running, if necessary).	Trailers
	Any warning device or pressure/vacuum gauge does not operate correctly.	Trailers
	The motor vehicle's brake test results do not meet the specified stopping distance requirements. <b>(See Note 1)</b>	Trailers
	Any brake component is broken, excessively worn, leaking, contaminated or is not securely mounted.	Trailers
	Linkages are not complete and/or components are unduly worn.	Trailers
	Rods and cables are repaired by welding or joining.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
8.2 Brake system operation <i>Cont'd</i>	The brake controls of the towing unit, when operated, do not cause the corresponding trailer brake to operate (with the engine of the towing unit running, if necessary).	Light Vehicles L-Group
	Trailers with a Gross Trailer Mass (GTM) in excess of 0.75 tonne but not exceeding 2.0 tonnes, are not equipped with a braking system which operates on at least half the number of axles (Override or electric are acceptable). <b>(See Notes 7 and 8)</b>	Light Vehicles L-Group
	Trailers exceeding 2.0 tonnes GTM are not equipped with brakes which operate on all wheels. <b>(See Notes 7 and 8)</b>	Light Vehicles L-Group
	Brakes fitted to trailers exceeding 2.0 tonnes GTM are not equipped with an effective breakaway system.	Light Vehicles L-Group
	Trailers fitted with double line braking systems do not automatically apply and remain applied for at least 15 minutes after the control and supply lines are disconnected from the towing vehicle.	Light Vehicles L-Group
	Operation of the service brake of the tow vehicle does not result in operation of the trailer brake.	Light Vehicles L-Group
	Any trailer having brakes which are air or vacuum assisted is not fitted with a reservoir that is protected by a check valve.	Light Vehicles L-Group
	With any brake fully applied, any stroke indicator runs out of travel or indicates that adjustment is necessary.	Light Vehicles L-Group
	Brake chamber push rods move more than 50% of their maximum stroke or travel over centre with the brakes fully applied.	Light Vehicles L-Group

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
8.2 Brake system operation <i>Cont'd</i>	Brake adjusters are not properly adjusted, are bent, damaged or excessively worn.	Light Vehicles L-Group
8.3 Testing of trailer brakes	The brake/s do not retard the movement of the trailer.	Light Vehicles L-Group
8.4 Brake pedal/lever condition	A brake pedal does not have an effective anti-slip surface.	Trailers
	On rubber faced brake pedals, any metal is showing.	Trailers
	The brake pedal is bent, damaged, broken or misaligned (outside scope of manufacturer's original design).	Trailers
	The brake pedal is not secure, not correctly adjusted, binds or is worn so as to affect efficient operation.	Trailers
8.5 Pedal travel	Maximum brake pressure is not achieved with one application of the brake pedal/lever and is not at least 50% of the maximum travel or in accordance with the individual vehicle manufacturer's specifications.	Trailers
	The brake pedal does not remain firm in accordance with the vehicle manufacturer's specifications when light foot pressure is maintained in the applied direction.	Trailers
	There is an indication of air in the hydraulic system.	Trailers
	A brake pedal/lever does not have free travel in accordance with the vehicle manufacturer's specifications.	Trailers
	When not in use, the brake pedal/lever does not return to the fully released position.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
8.6 Hand/park brake and control levers	Linkages are not complete or parts are unduly worn.	
	Cables are frayed, damaged or restricted.	
	Rods and cables are repaired by welding or joining.	
	The brake does not fully release when the release control is operated.	
	Any hand brake component is not fitted with a locking device capable of holding in any position.	
	Any hand brake component is damaged, bent, broken, restricted, missing, not secure or does not allow sufficient application of the hand/park brake.	
	A handle or pedal of a parking/hand brake fitted to a vehicle does not have a reserve of travel of at least one-fifth of the maximum range of application.	
	The control lever does not have a mechanical locking system to enable sustained operation.	
	For a motor vehicle built after 1930, the parking/hand brake is not able to hold the vehicle stationary on a gradient of at least 12%.	L-Group Trailers
	The hand/park brake (as applicable to side cars and motortrikes) fails to stop the motorbike being moved and is not able to hold the motorbike for a period of 5 minutes, facing each way, on a gradient of not less than 30% (as per ADR 33/00).	Light Vehicles Trailers
	Motorcycles fitted with a sidecar, or motortrikes, do not have a hand/park brake fitted.	Light Vehicles Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
8.7 Hydraulic lines/hoses	Hydraulic lines/hoses are not securely mounted, not free from damage or corrosion, show evidence of leakage or are not constructed of approved material. <b>(See Notes 2 and 6)</b>	
8.8 Cylinders and calipers	Hydraulic components are not secured in a manner as recommended by the manufacturer or are seized, restricted or show evidence of leakage.	
8.9 Reservoirs	Any reservoir is not filled to the manufacturer's recommended minimum level or shows evidence of leakage.	
	Any reservoir lid does not seal correctly.	
8.10 Vacuum and air components	Brake components are not secure or operational.	
	Any components are frayed, perished, corroded or misaligned, or show evidence of leakage.	
	Filter units for air compressors or vacuum pumps are missing, loose, blocked or damaged.	
	Vacuum is not available immediately the engine is started.	
	After engine shut down, there is not sufficient vacuum reserve to allow for at least one assisted brake application.	
	Componentry is not correctly adjusted or free from binding.	
8.11 Discs, pads, drums and linings	Brake linings are worn below wear indicators. If no indicators are provided, the thinnest part of the lining is worn below manufacturer's specifications. <b>(See Notes 3 and 5)</b>	
	Drums or disc rotors are worn or machined below manufacturer's specifications. <b>(See Note 4)</b>	

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
8.11 Discs, pads, drums and linings <i>Cont'd</i>	There are substantial cracks on friction surfaces, external cracks or mechanical damage.	
	Lining material is contaminated with oil, grease or brake fluid.	

#### Notes about Section 8 (Brakes):

1. Minimum Light vehicle service brake deceleration values from 35km/h

	Vehicle with a gross vehicle mass Under 2.5 tonne must achieve a deceleration value of at least:	Vehicle with a gross vehicle mass of at least 2.5 tonne must achieve a deceleration value of at least:
<b>Average Value</b>	3.8m a second a second (39%g)	2.8m a second a second (29%g)
<b>Peak Value</b>	5.8m a second a second (60%g)	4.4m a second a second (45%g)

In the case of a vehicle that **cannot** be tested with a decelerometer, the service braking system must stop the motor vehicle from a speed of 35 km/h:

- a) within 12.5 metres for a vehicle or combination with a gross mass up to 2.5 tonnes;
- b) within 16.5 metres for a vehicle or combination with a gross mass of 2.5 tonnes or over.

Minimum Light vehicle emergency brake deceleration values from 35km/h

	Vehicle with a gross vehicle mass Under 2.5 tonne must achieve a deceleration value of at least:	Vehicle with a gross vehicle mass of at least 2.5 tonne must achieve a deceleration value of at least:
<b>Average Value</b>	1.6m a second a second	1.1m a second a second

	<b>(16%g)</b>	<b>(11%g)</b>
<b>Peak Value</b>	<b>1.9m a second a second (19%g)</b>	<b>1.5m a second a second (15%g)</b>

In the case of a vehicle that **cannot** be tested with a decelerometer, the emergency braking system must stop the motor vehicle or combination from a speed of 35 km/h:

- a) within 30 metres for a vehicle or combination with a gross mass up to 2.5 tonnes;
- b) within 40.5 metres for a vehicle or combination with a gross mass in excess of 2.5 tonnes.

Minimum motorbike service brake deceleration values from 35km/h

	<b>A motorcycle must achieve a deceleration value of at least:</b>
<b>Average Value</b>	<b>3.8m a second a second (39%g)</b>
<b>Peak Value</b>	<b>5.8m a second a second (60%g)</b>

In the case of a vehicle that **cannot** be tested with a decelerometer, the service braking system must stop the motor vehicle from a speed of 35 km/h:

- a) within 12.5 metres for a vehicle or combination with a gross mass up to 2.5 tonnes;
- b) within 16.5 metres for a vehicle or combination with a gross mass of 2.5 tonnes or over.

2. ADR 7/00 – Hydraulic Brake Hoses was repealed as of 18 December 2003 and the requirements for hydraulic brake hoses are now included in ADR 42/04 **Section 15 (Brake Tubing and Brake Hose) which states;**

*Flexible hydraulic brake hoses, air or vacuum brake tubing and air and vacuum hose, flexible and hydraulic power hose between the 'Brake Power Unit 31/00' or 'Brake Power Unit 35/00' and the master cylinder or its equivalent must conform to SAA, SAE, BS, JIS, DIN, ISO or ECE Standards specified for flexible brake hoses, air brake tubing or hose or vacuum brake tubing or hose or hydraulic power tubing or hose and be fitted to the vehicle so as to prevent chafing, kinking or other mechanical damage under normal motion of the parts to which they are attached.*

**Note:** The repealing of the ADR now permits hydraulic brake hoses to comply with the requirements of ADR 42/04. As such, older vehicles can comply with the revised standard.

Made up hoses are not acceptable. Where brake hoses are replaced with aftermarket products, relevant standards approval marking is required.

Braided hoses are acceptable provided they are approved and correctly marked. Refer to Vehicle Standards Instruction G21 – Information Sheets for Approved Examiners - Information Sheet No. 7 – Braided Brake Hoses.

3. Where manufacturer's specifications are not provided, the minimum thickness for bonded linings is 0.8mm or 0.8mm above the head of a rivet.
4. Where manufacturer's specifications are not provided for drums, scoring must not be more than 1.5mm for light vehicles. Refer to AIS Information Sheet No. 16 - Brake Drums and Discs.
5. When an approved examiner is inspecting a braking system and components such as pads, linings, discs and drums are not visible, the wheels and drums must be removed to ensure all parts are in a serviceable condition.

An approved examiner may require the removal of one (1) or more wheels and brake drums or rotors if the examiner has reasonable grounds to believe that a defect exists.

Where wheels and brake componentry are removed for the purpose of inspection, the proprietor must notify the owner of this requirement and negotiate appropriate labour costs and charges for non re-useable parts such as lock nuts, lock tabs, split pins, lubricants etc. before proceeding. These additional charges are not part of the examination fee.

6. Normal commercial copper tubing has been prohibited from use in brake systems because it is considered prone to cracking due to work hardening. However, there is a Society of Automotive Engineers (SAE) Recommended Practice called Tubing – Motor Vehicle Brake Tubing Hydraulic – SAE J1047 which is the accepted industry standard.

Persons wishing to use copper tube for vehicle hydraulic brake lines must first provide proof of compliance with SAE J1047 or equivalent standard.

7. Aggregate Trailer Mass (ATM) is the total mass of the laden trailer when carrying the maximum load recommended by the manufacturer. This includes any mass imposed onto the drawing vehicle when the combination vehicle is resting on a horizontal supporting plane.

Gross Trailer Mass (GTM) is the mass transmitted to the ground by the axle or axles of the trailer when coupled to a drawing vehicle and carrying its maximum load approximately uniformly.

#### 8. Brake testing of trailers fitted with override brakes

Where possible, testing of any override brake system should be undertaken by compressing the brake actuating device and attempting to move the trailer. This can only be undertaken where a parking brake is fitted to the trailer. In accordance with the ADRs, most trailers with override brakes are not required to be fitted with a parking brake. However, a suitable device can usually be easily incorporated into the actuating mechanism and is highly recommended for improving safety when the trailer is uncoupled from the towing vehicle.



Brake testing of trailers fitted with brakes other than override brakes

With the trailer attached to the towing vehicle, apply the trailer service brake and attempt to move the trailer forward.

Testing of the park brake, where fitted

Apply the parking brake and attempt to move the trailer. The trailer may be coupled to the towing vehicle for the test but it should be ensured that the transmission is in neutral and the brakes are off.

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<b>Section 9 – Engine, driveline and emissions</b> <b>Objective:</b> To ensure the engine, driveline and associated components provide a controlled transmission of power to the driving wheels.		
<p>In this section—</p> <p><b>Chain</b> include a belt.</p> <p><b>Drive line components</b> includes constant velocity joints, universal joints, support bearings, splines or any other components that make up the drive line.</p> <p><b>Exhaust components</b> include any part that makes up the exhaust system of a vehicle and includes the manifold, pipes, muffler, resonator and catalytic converter.</p> <p><b>Fuel delivery system</b> includes carburettors, engine management and injection systems.</p> <p><b>Powertrain</b> means the engine and transmission.</p> <p><b>Transmission</b> includes gearbox.</p>		
<b>9.1 Clutch operation</b>	Clutch components are not operational, are incorrectly adjusted or are cracked, bent or broken.	Trailers
	There is leakage of hydraulic fluid from the system.	Trailers
	There is an indication of air in the hydraulic system.	Trailers
	When not in use, the clutch pedal does not return to its original position.	Trailers
<b>9.2 Transmission operation (manual and automatic)</b>	Any gear selected disengages whilst the vehicle is in motion.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
9.2 Transmission operation (manual and automatic) <i>Cont'd</i>	The gear lever location has been moved from the vehicle manufacturer's original position without specific approval.	Trailers
	The gear selector linkage is worn so as to affect the safe use of the motor vehicle on a road.	Trailers
	The transmission is worn so as to affect the safe use of the motor vehicle on a road (i.e. cannot select a gear/position easily or selects the incorrect gear/position, excessive transmission/clutch slippage).	Trailers
	The vehicle is able to be moved when park is selected (automatic transmission equipped vehicles).	Trailers
	Where an automatic transmission is fitted, the engine is capable of being started in other than the park or neutral positions.	Trailers
	A vehicle fitted with automatic transmission does not have, in the driver's compartment, an indicator showing the transmission control position.	Trailers
	Reverse gear is not fitted or cannot be selected (not applicable to L-group vehicle with an unladen mass of less than 450kg).	Trailers
	The gear selector indicator (where applicable) is not operational or is not illuminated when the park/head lights are turned on.	Trailers
9.3 Engine and transmission mountings	The powertrain is not securely mounted to the chassis/frame of the vehicle.	Trailers
	Powertrain mountings and bolts are not securely fastened or free of cracks or distortion.	Trailers
	Rubber components are oil soaked, perished, broken or deteriorated.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
9.4 Leaks	Any component leaks oil on to the roadway or onto any exhaust system or brake component. <b>(See Note 5)</b>	Trailers
	Seals and covers between the engine and passenger compartment are missing, distorted or damaged in a way that allows fumes to enter the passenger compartment.	Trailers
9.5 Engine	An emission related component originally fitted to the vehicle is altered, modified or removed so that it no longer operates as intended.	Trailers
9.6 Replacement engine	A replacement engine, other than one offered as an option by the vehicle manufacturer for that make and model, is not certified by an Approved Person or an endorsed departmental approval letter.	Trailers
9.7 Engine controls	Engine controls as fitted by the manufacturer (including cruise control) do not operate in a smooth and efficient manner.	Trailers
	Engine speed does not return to normal idle position upon release of the accelerator pedal or throttle control. <b>(See Note 6)</b>	Trailers
	Vehicles fitted with a compression ignition engine (diesel) are not fitted with a locking device that prevents the engine from being started by accidental and inadvertent means.	Trailers
	Any component is adjusted so that it increases exhaust emissions including smoke.	Trailers
9.8 Differential	The differential is worn or modified so as to affect the safe use of the motor vehicle on a road.	Trailers
	Drive line components are not secure or free of excessive wear, back lash or seizure which could cause component failure.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
9.9 Drive shafts, axles and flexible couplings	Constant velocity joint boots are not in good condition or are perished or deteriorated in such a way that lubricants can escape.	Trailers
	Constant velocity joint boot retaining clamp/clips are missing, damaged or not performing their intended function.	Trailers
	Any transmission drive shaft is bent, damaged, loose or noticeably misaligned.	Trailers
	A chain is worn outside of manufacturer's specifications.	Trailers
	Drive sprockets are not free from excessive wear or are incorrectly adjusted.	Trailers
	A chain or drive shaft guard is not fitted, securely mounted, in good condition or it does not provide adequate cover. <b>(See Note 7)</b>	Trailers
9.10 Fuel systems	Replacement fuel delivery systems do not continue to comply with the emission requirements applicable at the time of the vehicle's manufacture.	Trailers
	Air cleaners are not fitted. <b>(See Note 8)</b>	Trailers
	An aftermarket turbocharger assembly other than one offered as an option by the vehicle manufacturer for that make and model is fitted and is not certified by an Approved Person in accordance with the National Code of Practice for Light Vehicle Construction and Modification or an endorsed departmental approval letter. <b>(See Note 1)</b>	Trailers
	Nitrous oxide injection equipment is fitted, irrespective of its operational ability.	Trailers
	The fuel filler pipe inlet and cap are not located on the outside of the vehicle unless originally fitted inside by the manufacturer.	Trailers
	Fuel system components are leaking.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
9.10 Fuel systems <i>Cont'd</i>	Fuel lines are in contact with moving parts, or a heat source, or are kinked, cracked or not secure.	Trailers
	The fuel tank/s or fuel lines is/are affected by rust or corrosion.	Trailers
	A fuel tank cap that complies with manufacturer's specifications is not fitted, is damaged or is not secure.	Trailers
	Fuel hoses have incorrect fuel pressure ratings for their application or are not suitable for the fuel type.	Trailers
	The fuel tank/s is/are not securely mounted or straps, supports, mounting brackets or fasteners are missing, cracked broken or loose.	Trailers
9.11 Exhaust construction	Any original emission related component is not properly located, connected, damaged, deteriorated or altered in any way to reduce effectiveness (e.g. a catalytic converter is not fitted where one was originally provided or has been bypassed).	Trailers
	Any pipe or muffler incorporated in the exhaust system to ensure the vehicle maintains compliance with ADRs for vehicle noise emission is not fitted.	Trailers
	Any alteration or modification to the exhaust system is not to a standard provided by the motor vehicle's original manufacturer or Vehicle Standards Bulletin 14. <b>(See Note 2)</b>	Trailers
	An exhaust system component fitted external to the motor vehicle body is not protected by suitable guarding.	Trailers
	An exhaust system does not discharge in accordance with prescribed standards. <b>(See Note 3)</b>	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
9.11 Exhaust construction <i>Cont'd</i>	Exhaust components are not securely mounted with adequate clearance between other parts of the vehicle and the road.	Trailers
	The exhaust system is fitted with a device designed to bypass noise and/or gaseous emission control devices which would render the system non-complying to the ADRs.	Trailers
	A motorbike manufactured from 1 July 1988 does not have all components of the silencing system marked with the name or trade name of the manufacturer.	Light Vehicles Trailers
9.12 Emissions	There are leaks or excessive noise from the exhaust system and joints during operation (excluding manufacturer's drain holes in mufflers).	Trailers
	The engine emits sparks, flames, excessive gases, oil or fuel residue.	Trailers
	When operating, an engine of a motor vehicle manufactured after 1930 emits visible emissions for a period of 10 seconds or more. <b>(See Note 4)</b>	Trailers
	Any noise reducing or absorbing equipment is missing.	Trailers
	Crankcase gases escape into the atmosphere (applies to petrol engines fitted with positive crankcase ventilation only).	Trailers
9.13 Dual fuel systems	A vehicle operating on Liquid Petroleum Gas (LPG) or Compressed Natural Gas (CNG) and petrol does not have the emission control equipment fitted to enable compliance with emission levels when operating on petrol.	Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
9.14 Hybrid Electric and Battery electric vehicles	<p><b><u>CAUTION:</u></b></p> <p>Hybrid/electric vehicles pose a risk of electric shock and should not be worked on unless the individual holds the correct certification and has an understanding of the system.</p> <p>It is important to remember that even with the vehicle's high voltage system disconnected a voltage/current can still be produced if the vehicle's wheels rotate.</p> <p>Additionally, when inspecting a hybrid vehicle please be aware that unless the vehicle is completely shutdown the combustion engine may start without warning to charge the vehicle's battery.</p>	
	High voltage cabling insulation is deteriorated, damaged or missing.	Trailers
	High voltage cabling is not adequately secured.	Trailers
	Battery pack is leaking.	Trailers
	Battery pack is not secured.	Trailers
	Battery ventilation system blocked or not operating.	Trailers
	A motor, generator (including regenerative braking), combustion engine or combination of any units is damaged or does not operate as intended which affects the safe operation of the vehicle (i.e. limited acceleration, failure to achieve normal road speeds, decreased braking performance).	Trailers

**Notes about Section 9 (Engine, driveline and emissions):**

1. Engines/turbochargers/superchargers fitted as optional equipment by the vehicle manufacturer are acceptable. This may require upgrading of vehicle componentry to ensure it is identical to a vehicle originally produced by the manufacturer in this configuration.
2. Proof of testing to an acceptable standard may be required.
3. The exhaust outlet must:



- a. extend at least 40mm beyond the furthestmost outboard or rearmost joint of the floor pan which is not continuously welded or permanently sealed which could permit direct access of exhaust gases to the passenger compartment, but not beyond the perimeter of the vehicle when viewed in plan;
  - b. if to the side of the vehicle, discharge to the right hand side of the vehicle and downwards at an angle to the horizontal of not less than 15 degrees and not more than 45 degrees;
  - c. if to the rear of the vehicle, discharge at not more than 10 degrees above or 45 degrees below the horizontal.
- 4. This does not apply to emissions that are visible only because of heat or the condensation of water vapour.
- 5. Motorbikes manufactured with total loss lubricating systems which have been designed to "leak" are excluded from this condition.
- 6. For Vintage and Veteran motorbikes manufactured without a self-releasing throttle, the throttle does not operate in the manner prescribed by the manufacturer.
- 7. The guard must provide protection for at least the upper free run of the drive chain and must extend at least 300mm rearward of the rearmost footrest or to the vertical centre of the drive sprocket.
- 8. If applicable, owner to supply documented confirmation that air cleaners were not fitted as original equipment.

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
<b>Section 10 – Vehicle safety features</b>  For well over 40 years, motor vehicles have been fitted with traditional safety features such as seatbelts, collapsible steering columns and lighting systems. However, with advancements in technology and the desire for safer motor vehicles, more complex safety systems have been designed and fitted to the modern motor vehicle.  These systems provide a host of safety features to protect vehicle occupants and other vulnerable road users in the event of a crash. They also provide safety features that assist in preventing or reducing the severity of a crash. These safety features are divided into two categories, namely, active safety features and passive safety features.  Active safety features are designed to help avoid accidents and include such systems as Electronic Stability Control, Anti-lock braking and Electronic Brake force Distribution. Passive safety features are designed to help reduce the injuries to vehicle occupants and include such systems as airbags, seatbelt pretensioners and brake pedal detachment.  These safety features are generally complex and rely on a number of other vehicle systems to perform their intended function correctly. The manner in which these safety features operate can also vary between manufacturers and, as such, it is important to have access to manufacturer's specifications.		
In this section—  <b>Active safety system</b> includes electronic stability control (ESC), traction control, anti-lock brake system, electronic brake-force distribution and automated emergency braking systems.  <b>Passive safety system</b> includes airbags, seat belt pre-tensioners and seat belt load limiters (webbing clamp).		
<b>10.1 Active safety features</b>	Where provided by the vehicle manufacturer, active safety system is damaged, has components missing or the system does not operate within the manufacturer's specifications. <b>(See Note 1)</b>	
	A detachable pedal (i.e brake pedal) has been triggered, is damaged or has not been repaired as per the manufacturer's specifications.	
<b>10.2 Passive safety systems</b>	An airbag installed by the vehicle manufacturer is not fitted or operating within the manufacturer's specifications. <b>(See Note 1)</b>	L-Group Trailers

Column 1 Component	Column 2 Reason for rejection	Column 3 Does not apply to
	A seatbelt pre-tensioner has been deployed, is missing, inoperable or damaged. <b>(See Note 1)</b>	L-Group Trailers
	A seatbelt load limiter (webbing clamp) has been activated, is damaged or has not been repaired as per the manufacturer's specifications. <b>(See Note 1)</b>	L-Group Trailers

**Notes about Section 10 (Vehicle safety features):**

1. Due to the complexity of the system's components and their operation, it will be acceptable to rely on the vehicle's fault code logging system as a means of indicating that the system is operable (unless other aspects of the inspection indicate that the system is damaged or not operable).

Please be aware there is no requirement to check the performance/operation of the system during a road test. Under no circumstances is it permissible to operate the vehicle in a dangerous manner or in a way which contravenes Queensland law.

